LY320135

Cat. No.: HY-W011040

CAS No.: 176977-56-3

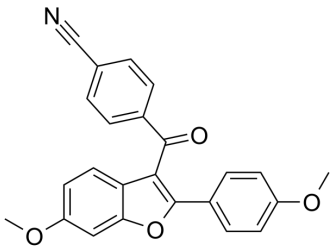
Molecular Formula: $C_{24}H_{17}NO_4$

Molecular Weight: 383.4

Target: Cannabinoid Receptor; 5-HT Receptor; mAChR

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	LY320135 is a potent and selective antagonist of CB1 receptor, with a K_i of 141 nM. LY320135 also binds to 5-HT_2 and muscarinic receptors with K_is of 6.4 μM and 2.1 μM, respectively. LY320135 exhibits neuroprotective effect[1][2].			
IC_{50} & Target	CB1 141 nM (Ki)	5-HT_2 Receptor 6.4 μM (Ki)	muscarinic receptor 2.1 μM (Ki)	CB2 >10 μM (Ki)
In Vitro	LY320135 has a relatively low affinity for the CB2 receptor (K_i=14.9±0.4 μM) and ten other unrelated receptors[1]. LY320135 (1 nM-10 μM) inhibits the anandamide-mediated forskolin-stimulated cAMP accumulation in CHO cell, with an IC_{50} of 734±122 nM[1]. LY320135 (0.1-1000 nM; 1-8 min) can reverse calcium current (I_{Ca}) inhibition by WIN 55212-2 in N18 cells, with an IC_{50} of 55±10 nM[1]. LY320135 (1 μM) prevents activation of K_{ir} current by WIN 55212-2 in AtT-20-CB1 cells[1]. LY 320135 (0.001-1 μM) reduces CA1 injury induced by 20 min oxygen-glucose deprivation (OGD) in a concentration-dependent manner[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

REFERENCES

[1]. Felder CC, et, al. LY320135, a novel cannabinoid CB1 receptor antagonist, unmasks coupling of the CB1 receptor to stimulation of cAMP accumulation. J Pharmacol Exp Ther. 1998 Jan; 284(1):291-7.

[2]. Landucci E, et, al. CB1 receptors and post-ischemic brain damage: studies on the toxic and neuroprotective effects of cannabinoids in rat organotypic hippocampal slices. Neuropharmacology. 2011 Mar; 60(4):674-82.

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